

-- REMARKS --

Claims 1-32 are currently pending in the application. Claims 26-32 have been withdrawn from consideration. Claims 1 and 12-16 have been amended. The changes to the amended claims from the previous versions to the rewritten versions are shown above with a strike-through for deleted matter and underlines for added matter. No new matter has been added as a result of these amendments.

In the outstanding Office Action, claims 12 and 15 have been objected to as containing typographical errors. These claims have been amended to correct the errors. In particular, claim 12 has been amended to eliminate the extraneous words "the to" from line 4. Claim 15 has been amended to properly recite that the cannula slidingly engages an exterior surface of the distal end of the stiffening member.

In the outstanding Office Action, claim 12 has been rejected under 35 U.S.C. § 112, second paragraph. In particular, the Examiner has asserted that the limitation of claim 12 requiring the distal end of the catheter to be in sliding engagement with the stiffening member is inconsistent with the limitation of claim 8 requiring the proximal portion of the stiffening member to be fixed with respect to catheter.¹ Applicant respectfully disagrees that these limitations are inconsistent and therefore traverses the rejection. As disclosed in paragraph [0062] of the specification for the present application, in certain embodiments the distal end of the catheter (near the proximal end of the balloon) may be slidingly engaged with the stiffening member. The arrangement permits the distal ends of these two components to axially move relative to each other even though the proximal ends of these components are fixedly connected together (as required by claim 8). Such relative axial movement at the distal ends may be caused, for example, by changes in the relative temperatures of the components which may cause one component to elongate or shorten more than the other, or by bending of the device as it is advanced through the bodily lumens of the patient. Thus, claim 12 merely requires that the distal end of the catheter be connected to the stiffening member in a manner that does not restrain relative axial movement of these components.

¹ Claim 12 depends from claim 8 via intervening claim 9.

In the outstanding Office Action, the previous claim rejections under 35 U.S.C. §§ 102(b) and 103(a) as being anticipated by or obvious in view of EP Patent No. 1016430 to Sakai et al. was withdrawn. However, a new grounds of rejection has been made in view of US Patent No. 5,318,535 to Miraki (hereinafter "Miraki"). In particular, claims 1, 7, 12-16 and 19 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Miraki. Claims 2-6, 8-11, 17-18 and 20-25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Miraki, either alone or in combination with one or more of US Patent No. 5,700,242 to Mulder, US Publication No. 2003/0130716 to Weber et al., US Patent No. 5,425,712 to Goodin, US Patent No. 6,514,228 to Hamilton et al., US Publication No. 2002/0128596 to Stivland et al., US Patent No. 5,364,354 to Walker et al., US Patent No. 5,108,416 to Ryan et al., US Patent No. 5,269,759 to Hernandez et al., and US Patent No. 5,605,543 to Swanson. The rejections under 35 U.S.C. §§ 102(b) and 103(a) are respectfully traversed.

Independent claim 1 is directed to a balloon catheter comprising a catheter and stiffening member extending from the distal end thereof, wherein the stiffening member is fixedly and non-removably connected to the catheter at one or more locations, and further wherein the proximal end of the balloon is fixedly connected to the distal end of the catheter and the distal end of the balloon is non-fixedly connected to the stiffening member. Claim 1 further requires that the distal end of the balloon be restrained against transverse movement by the stiffening member, while not being restrained against axial movement by either the stiffening member or the catheter. As explained in detail in the specification for the present application, the claimed configuration provides a balloon that is allowed to lengthen or retract (e.g., during inflation or deflation) without being restrained by either the stiffening member or the catheter. The distal end of the balloon is nevertheless constrained against transverse movement by the stiffening member, which is fixedly connected to the catheter, so as to ensure that the balloon remains centered/aligned with the axis of the catheter. As will be demonstrated below, these features and limitations are neither suggested nor disclosed by the prior art.

The Examiner has asserted that Mirakai discloses a balloon catheter having a stiffening member that is non-fixedly connected to the distal end of the balloon. In particular, the Examiner asserts that the wire guide (12) shown in Figs. 5-7 meet the

stiffening member limitation of claim 1. Applicants respectfully disagree. The wire guide (12) of Miraki is not fixedly (or non-removably) connected to the catheter at one or more locations. To the contrary, the wire guide (12) is completely removable from the catheter. The wire guide (12) of Miraki therefore does not meet the stiffening member limitations of claim 1. Accordingly, Miraki fails to disclose or suggest the features and limitations of claim 1. The other references of record likewise fail to disclose or suggest these same features and limitations.

Accordingly, and for at least the reasons discussed above, independent claim 1 is patentable over the art of record. The claims 2-25 are each dependent on claim 1, and are therefore likewise patentable for at least the same reasons that claim 1 has been demonstrated above to be patentable. Further discussion of these dependent claims is therefore unnecessary.

It is therefore believed that the application is in condition for allowance, and such allowance is now earnestly requested. If for any reason the Examiner is not able to allow the application, he is requested to contact the Applicants' undersigned attorney at (312) 321-4273.

Respectfully submitted,

Michael E. Milz
Michael E. Milz
Registration No. 34,880
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200